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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,007

12/30/2003

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EXAMINER

NOONAN, WILLOW W

ART UNIT

PAPER NUMBER

2146

MAIL DATE

DELIVERY MODE

06/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,007	Applicant(s) KAUTZLEBEN, REINHOLD	
	Examiner WILLOW NOONAN	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/18/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application No. 10/750,007 has a total of 31 claims pending in the application; there are 3 independent claims and 28 dependent claims, all of which are ready for examination by the examiner.

Response to Arguments

2. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-14, 17-24, and 27-31 are rejected under 35 U.S.C. 102(b) as being unpatentable over **Jung** (U.S. Patent No. 6,308,208) in view of **Gorman** (U.S. Patent No. 6,795,791).

Regarding claims 1, 12, and 22, Jung teaches a monitoring system comprising a cluster of application servers communicatively coupled on a network to server applications over the network to a plurality of clients (see Jung at col. 1, lines 5-10, "implementing a monitoring task across distributed computer resources in the

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environment”), each of the application servers comprising a plurality of server nodes (see Jung at col. 2, lines 17-24, “As a concrete example, a cell representing a database server resource is an observer of cells representing disk drives, operating systems, and application processes. Thus, the database server may be construed as a “master” resource comprising a set of computing resources (e.g., disk drives, operating system and application processes) whose individual states may impact the state of the master resource.”). Jung further teaches a plurality of management bean (“MBean”) servers associated with the server nodes of the application servers. See Jung at col. 2, line 65 – col. 3, line 2 (“Each cell is associated with a respective on of a set of given computing resources”). Jung teaches a plurality of runtime MBeans associated with specified resources on each of the server nodes, each runtime MBean registered with at least one of the individual MBean servers, each of the runtime MBeans collecting and reporting monitoring data for its associated resource. See Jung at col. 6, line 65 – col. 7, line 5 (describing how the each monitoring agent is responsible for monitoring the resources in its cell). Jung further teaches notification logic to generate notification in response to certain specified events associated with certain resources of certain MBeans, the notification logic distributing the notifications across all, or a subset of, the server nodes of the cluster. See Jung at fig. 7 (illustrating the process of propagating state changes to other server nodes).

Jung does not teach the MBean server comprising a plurality of monitor MBeans generated by a monitor server, or the runtime MBeans being mapped to at least one of the monitors MBeans. However, Gorman teaches that it is well known to use monitor

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MBeans mapped to runtime MBeans. See Gorman at col. 1, lines 59-67 (“The system utilizes a generator bean to generate a signal. ... A monitor bean is used to monitor the signal being generated. A notification is created by an MBean in response to the monitoring, such as may notify a user or application that the signal has reached a certain value, or may store the current value to a data store”). Gorman further teaches that the monitor MBeans may be registered with a MBean server. See Gorman at fig. 1.

It would have been obvious to one of ordinary skill to use Gorman’s technique in Jung’s system, because Gorman teaches that the disclosed invention is useful for managing computer resources. See *generally* Gorman at col. 1, lines 25-56.

Regarding claims 2, 13, and 23, Jung teaches that each server node is assigned a dedicated MBean server. See Jung at fig. 5.

Regarding claims 3, 14, and 24, Jung teaches a dispatcher node configured within each application server to distribute client requests to each of the server nodes. See Jung at col. 6, lines 35-43 (“the dispatch mechanism compiles the appropriate Java class files (preferably based on the task or some characteristic thereof) and dispatches the applet (as the software agent) in the network. An applet is then executed on the JVM located at a receiving node”). Jung teaches that the dispatcher has a dedicated MBean server associated therewith to monitor resources within the dispatcher wherein MBeans associated with the resources generate notifications via the notification logic in response to specified events. See Jung at fig. 5; Jung at fig. 8 (illustrating that the single high-level master resource has an associated monitoring cell); Jung at col.7-8 (“Thus, the cellular automaton includes a control mechanism for propagating changes in

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the attributes of any cell to all observers of that cell ... [effecting] automated distributed monitoring in a large distributed computing environment”)

Regarding claims 6, 17, and 27, Jung teaches that among the attributes monitored in a cell are the individual *states* of constituent resources. See Jung at col. 2, lines 20-24.

Regarding claims 7, 18, and 28, Jung teaches a graphical visual administration interface configured to generate graphical images representing the notification. See Jung at col. 8, lines 50-67 (“changes to those cells are then propagated to operator consoles, which preferably use visual user interface techniques to provide an operator with a dynamic view of the state of selected resources in the network”).

Regarding claims 8, 19, and 29, Jung teaches that the application servers comprise Java enterprise servers and wherein the notification logic comprises a notification service executed on one or more of the Java enterprise servers. See Jung at col. 6, lines 22-43.

Regarding claims 9, 20, and 30, Jung teach that each MBean reports MBean notifications to the notification logic through its respective MBean server. See Jung at col. 8, lines 37-39 (“As monitor values change across the lower level cells, such changes get propagated automatically (e.g., as events) to the higher level cell, which includes its own monitor”).

Regarding claims 10, 21, and 31, Jung teaches a central database to store monitor configuration data defining the resources to be monitored and the events to generate the notifications. See Jung at col. 6, lines 1-7 (“Manager preferably also

includes a database including information identifying a list of all machines in the distributed computing environment that are designed to be managed”).

Regarding claim 11, Jung teaches connector associated with each MBean server to communicatively couple each MBean server to the notification logic. See Jung at col. 8, lines 6-8 (“Resulting state changes are in turn propagated through the automaton by the control mechanism 55 as previously described. The control mechanism is preferably implemented in each software agent”).

5. Claims 4-5, 15-16, and 25-26 are rejected under 35 U.S.C. 103(a) for the reasons set forth above, further in view of **Tsun** (U.S. Patent App. Pub. No. 2004/0148610).

Regarding claims 4, 15, and 25, Jung does not teach that one of the specified events comprises a value associated with a resource reaching a first threshold value. Tsun does teach it is well known to use threshold triggers in network elements. See Tsun at p. 5, paragraph 46 (“threshold normal values”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Tsun’s thresholds in Jung’s system because Tsun discloses a related system for monitoring tasks on a network computer. See *generally* Tsun, *Abstract*.

Regarding claims 5, 16, and 26, Jung does not teach that one of the specified events comprises the value associated with the resource reaching a second threshold value, the second threshold value representing a critical resource value. Tsun does

teach it is well known to use second critical threshold trigger. See Tsun at p. 5, paragraph 46 (“threshold critical values”).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Please see the included *Notice of References Cited* for additional prior art considered pertinent to applicant's disclosure but not explicitly relied upon in this action.

8. The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and

line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

9. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willow Noonan whose telephone number is (571) 270-1322. The examiner can normally be reached on Monday through Friday, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Willow Noonan/

Examiner, Art Unit 2146

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2146